

CLAIMS

We claim:

5 1. A decorative laminate comprising, in order in the following superimposed
relationship:

a decorative layer; and

a core layer comprising PETG.

10 2. The decorative laminate of claim 1, wherein said decorative laminate is a high
pressure decorative laminate.

15 3. The decorative laminate of claim 1, wherein said decorative laminate is a low
pressure decorative laminate.

20 4. The decorative laminate of claim 1, wherein said decorative laminate is a
continuous laminate.

25 5. The decorative laminate of claim 1, wherein said PETG is at least one sheet of
PETG.

30 6. The decorative laminate of claim 1, wherein said core layer further comprises at
least one layer of a woven or non-woven sheet formed from a material selected from the group
consisting of glass, carbon or polymeric fiber.

7. The decorative laminate of claim 6, wherein said at least one layer is sandwiched
in between two PETG sheets.

5 8. The decorative laminate of claim 1, wherein said decorative laminate further
comprises an overlay layer on top of said decorative layer.

9. The decorative laminate of claim 8, wherein said overlay layer includes abrasive
particles.

10. The decorative laminate of claim 9, wherein said abrasive particles comprise
alumina.

11. The decorative laminate of claim 8, wherein said overlay layer is impregnated
15 with a melamine formaldehyde resin.

12. The decorative laminate of claim 1, wherein said decorative layer is impregnated
with a melamine formaldehyde resin.

20 13. The decorative laminate of claim 1, wherein said decorative layer includes a
printed pattern.

14. A decorative laminate comprising, in order in the following superimposed relationship:

a wear resistant layer;

a decorative layer; and

5 a core layer comprising at least one sheet of PETG.

15. The decorative laminate of claim 14, wherein said decorative laminate is a high pressure decorative laminate.

16. The decorative laminate of claim 14, wherein said decorative laminate is a low pressure decorative laminate.

17. The decorative laminate of claim 14, wherein said decorative laminate is a continuous laminate.

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18. The decorative laminate of claim 14, wherein said wear resistant layer is an overlay layer on top of said decorative layer, said overlay layer including abrasive particles.

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19. The decorative laminate of claim 18, wherein said abrasive particles comprise alumina.

20. A decorative laminate assembly comprising, in order in the following superimposed relationship:

(a) a decorative laminate top layer assembly comprising, in order in a superimposed relationship:

- (i) a decorative layer,
- (ii) a core layer comprising PETG; and

5 (b) a substrate attached to said decorative laminate top layer assembly.

21. The decorative laminate of claim 20, wherein said decorative laminate is a high pressure decorative laminate.

10 22. The decorative laminate of claim 20, wherein said decorative laminate is a low pressure decorative laminate.

23. The decorative laminate of claim 20, wherein said decorative laminate is continuous laminate.

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24. The decorative laminate of claim 20, wherein said PETG is at least one sheet of PETG.

25. The decorative laminate of claim 20, wherein said core layer further comprises at 20 least one layer of a woven or non-woven sheet formed from a material selected from the group consisting of glass, carbon or polymeric fiber.

26. The decorative laminate of claim 25, wherein said at least one layer is sandwiched in between two PETG sheets.

27. The decorative laminate of claim 20, wherein said decorative laminate further
5 comprises an overlay layer on top of said decorative layer.

28. The decorative laminate of claim 27, wherein said overlay layer includes abrasive particles.

29. The decorative laminate assembly of claim 20, wherein said substrate is water
resistant.

30. The decorative laminate assembly of claim 29, wherein said water resistant
substrate comprises polyvinyl chloride.

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31. The decorative laminate assembly of claim 29, wherein said water resistant
substrate comprises fiber reinforced cement board.

32. The decorative laminate assembly of claim 20, wherein said substrate is attached
20 to said top layer assembly with a water resistant adhesive.

33. A decorative laminate assembly comprising, in order in the following
superimposed relationship:

(a) a high pressure decorative laminate top layer assembly comprising, in order in
a superimposed relationship:

- (i) a wear resistant layer;
- (ii) a decorative layer; and
- 5 (iii) a core layer comprising PETG;

(b) a water resistant adhesive layer;

(c) a water resistant substrate, wherein said water resistant adhesive layer bonds
together said top layer assembly to said water resistant substrate.

10 34. The decorative laminate of claim 33, wherein said decorative laminate is a high
pressure decorative laminate.

15 35. The decorative laminate of claim 33, wherein said decorative laminate is a low
pressure decorative laminate.

36. The decorative laminate of claim 33, wherein said decorative laminate is
continuous laminate.

20 37. The decorative laminate of claim 33, wherein said PETG is at least one sheet of
PETG.

38. The decorative laminate of claim 33, wherein said wear resistant layer is an
overlay layer on top of said decorative layer, said overlay layer including abrasive particles.

39. The decorative laminate assembly of claim 33, wherein said water resistant substrate comprises polyvinyl chloride.

5 40. The decorative laminate assembly of claim 33, wherein said water resistant substrate comprises fiber reinforced cement board.

10 41. The decorative laminate of claim 33, wherein said core layer further comprises at least one layer of a woven or non-woven sheet formed from a material selected from the group consisting of glass, carbon or polymeric fiber.

15 42. The decorative laminate assembly of claim 41, wherein said at least one layer is sandwiched in between two PETG sheets.

43. A method for producing a decorative laminate comprising:

(a) assembling, in order in the following superimposed relationship, a wear resistant layer, a decorative layer, and a core layer, said core layer comprising PETG; and
(b) subjecting said assembly to heat and pressure, thereby laminating said assembly.

20 44. The method of claim 43, wherein said wear resistant layer is an overlay layer, said overlay layer including abrasive particles.

45. The method of claim 43, wherein said PETG is 0.020 inches thick.
46. The method of claim 43, wherein said pressure is between 1000 and 1200 psig.
- 5 47. The method of claim 46, wherein said temperature is between 125°C and 127°C.
48. The method of claim 47, wherein said heat and pressure is maintained for 25-30 minutes.
- 10 49. The method of claim 43, further comprising bonding said overlay layer, decorative layer, and core layer to a water resistant substrate after said subjecting to heat and pressure laminating step.
50. The method of claim 49, wherein said water resistant substrate comprises PVC.
- 15 51. The method of claim 49, wherein said water resistant substrate comprises fiber reinforced cement board.
52. The method of claim 49, wherein said PETG comprises at least one sheet of PETG.